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ABSTRACT

An economic model of the effects of colleges on their communities was developed. The Texas Input-Output Model was modified into a higher education budgetary model. Included were the positive benefits of tax savings and estimates of the net effect on various communities in which state-supported colleges and universities are located. The output measures were sales and employment. While the model was developed to illustrate the statewide effects of budgetary changes for all Texas colleges and universities, a fictitious urban and rural university were used for illustration. Equations for the budgetary input-output model cover: the number of people employed in the counties in the previous year, fall enrollment at each campus, budgeted appropriations for the previous fiscal year, and the estimated effects of the budgets on local economies. For both universities, employment and enrollment projections and retail sales estimates take into account the following conditions: no change in the previous budget, 10% reduction in the budget, and 5% increase in the budget. Several tables are provided. (SW)

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FORECASTING THE EFFECTS OF HIGHER EDUCATION APPROPRIATIONS ON LOCAL ECONOMIES

Presented at

Twenty-sixth Annual Forum
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Ann K. Dickey, Chair
Forum Publications Editorial
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FORECASTING THE EFFECTS OF HIGHER EDUCATION APPROPRIATIONS ON LOCAL ECONOMIES

ABSTRACT

In response to a proposed reduction in appropriations for Texas' public senior colleges and universities, the authors modified an established economic input-output model to examine the effects of various changes in the budgets of the institutions on local communities. This paper discusses the higher education model, the data generated from various manipulations for two fictitious institutions - one urban and one rural - and the resulting scenarios.

FORECASTING THE EFFECTS OF HIGHER EDUCATION APPROPRIATIONS ON LOCAL ECONOMIES

INTRODUCTION

In December, 1984 the Texas Legislative Budget Board pledged that state taxes would not be raised, despite an expected decrease in revenues. In order to produce a balanced budget, the Board recommended a 26% cut in higher education appropriations for the 1985-1987 biennium. In response to this recommendation, the Council of Presidents of Texas Senior Colleges and Universities prepared a "white paper" which discussed the total impact of public higher education on the state (1985). Part of that report included an estimate of the economic effects of colleges and universities on their respective communities. The authors were assigned the task of developing an economic model which would illustrate these effects. A major constraint on the task was that the results had to be presented in a very short period of time, two weeks. This paper discusses the model developed for higher education, the data generated from various manipulations of the model on two fictitious institutions -- one urban and one rural -- and the resulting scenarios.

REVIEW OF ECONOMIC EFFECTS

The impact of higher education upon an area's economy is not limited to the direct effects of university and student expenditures and employment. These expenditures are income to firms and households, which are spent in turn by the direct recipients on other products and services. The initial effect of

a university's budget is thus multiplied as the dollars work their way though the local economy. This multiplied effect can be measured and used in economic models. The ratio of the dollars spent to the dollars generated by their being re-spent is called a "multiplier". Actual values of the multipliers depend upon the geographic area and market sector (class of industry or type of business endeavor) being examined. As dollars are retained within an area or sector, the value of the multiplier increases. Because of this principle the larger the area, such as a state, the greater the multiplier.

Institutional researchers have calculated such multipliers and have used them to measure an educational institution's economic effect on a community. Most economic models consider the university as a part of the export sector of the local economy because the majority of it's income and students come from outside of the local community and the majority of it's expenditures are made outside of the area. The usual economic effects are expressed in positive terms of increased sales of goods and services and increased employment. Measures such as these have been useful in the past for generating community and legislative support. For reviews of various studies, the reader is referred to Salley (1978), California (1984), and Miller (1982).

The American Council on Education (ACE) has published a guide to estimating the economic effects of a college on the local community (Caffrey, 1971). This guide attempted to overcome many of the shortcomings of previous studies, particularly the absence of measures of negative effects, such as cost of public services and loss of tax dollars, which may exceed the

institution's positive effects. While this method is extensive (over 50 measurement areas and formulae are presented) and flexible, the massive size and numerous data requirements make it difficult to use in comparison studies or to answer "What if" questions. This guide has been used by other institutions and agencies (Jeancock, 1983; California, 1984; Romano, 1985).

Salley (1978) presented another method of calculating an institutional economic multiplier. This method, which used local value-added ratios to determine the inital effects of university purchases, requires expenditure data and surveys of faculty, staff, and students to determine local spending patterns. The institution's expenditure multiplier is calculated from these data. While this method is simpler than the ACE technique, it is limited to a single institution and does not provide a measure of the institution's effects on local employment. Salley's method has been used elsewhere (Kinkaid, 1984).

Engler (1980) presented a study of the Lousiana State University System's effects on the state's economy. Engler developed a model which used available data rather than surveys. It provided estimates of the effects the LSU System has on personnel expenditures, plant investment, and state-wide employment both directly through expenditures in those areas and indirectly in how those expenditures effect businesses which are suppliers to and dependent upon the LSU System. Engler discussed the effects of enrollment changes and increased plant investments on the Lousiana economy. Based upon reqression equations, this econometric model could be used in comparison studies and to answer "What if" questions.

When estimating the effect of an instutition's budget reduction coupled with a possible tax reduction, the net impact must include the effect of reduced taxes (i.e. more expendable personal income) on an area's economy. None of the above approaches provides this information. Leontief (1936) introduced a method, called Input-Output (I-O) analysis, which estimates the effects of economic transactions within and between all sectors of the economy. An economic sector is the collection of estblishments or organizations which produces the same kind of products, such as "Irrigated Cotton", "Feedlot Livestock Production", "Petroleum Refining", "Department and Variety Stores", etc. According to this model, "Input" is a transaction bringing money into an economic sector and "Output" is a transaction which moves money out of the sector. Money leaving the state (or market region) is considered an export since it is lost to the economic region being analyzed.

This method requires extensive transaction surveys to develop input-output tables. As should be expected, it is an expensive approach, especially when numerous market sectors are analyzed. However, multipliers can be derived from an existing input-output matrix and econometric equations can be developed. With the availablity of multipliers for different market sectors, comparisons can be made between channeling funds to one sector or another, such as household income and universities. One such model is the Texas Input-Output Model.

TEXAS INPUT-OUTPUT MODEL

The Texas Input-Output Model resulted from an effort by the Division of Planning Coordination of the Office of the Governor during the early

seventies to create regional input-ouput models for the state of Texas (Grubb, 1973). The purpose of the Texas and regional I-O models was to develop a tool which could be used by public planners to estimate the effects of proposed changes to the Texas and regional economies, by market sector. The regional models, of which the Houston-Galveston Input-Output Model (Stern, 1972) is one, were developed on 1967 data. These models were subsequently updated with 1978 data, modifying the multipliers used by the State of Texas in the Texas I-O model. The models contain multipliers for higher education, employment, personal expenditures, tax charges, etc. With the regional I-O models, these multipliers can be differentiated by area (rural/urban) and can be combined to estimate the net effect of various changes on geographical areas.

The Texas Input-Output Model includes 183 economic sectors based on the federal Standard Industrial Classification definitions. The model is presented as a square matrix in which the rows represent each sector's output (transactions going to another sector) and the columns represent each sector's input (transactions coming from another sector). An example of the model is displayed in Table 1. The result is a set of multipliers which describe the effects on the entire model if one dollar were added (or removed) from the existing economy.

Thus, the model considers both direct effects (the changes in the output of a given sector which result from a change in expenditures in that sector) and indirect effects (the change in the output of businesses which are suppliers to and dependent upon the sector which experiences the direct effect).

TEXAS HIGHER EDUCATION BUDGETARY MODEL

Multipliers from the Texas I-O Model and the Houston-Galveston I-O Model were used to simulate the budgetary options then being discussed by the state legislature: (1) increase state taxes to cover the existing rate of expenditures or (2) decrease the appropriations to higher education (and several other sectors) to match the projected short-fall in state revenues. Consequently, the factors used in the higher education budgetary model reflect the net difference between the two choices: Decrease input to higher education (i.e., reduce appropriations) with no change in sales taxes (Texas does not have a state income tax), or increase output from households (i.e., increase sales taxes) while holding input to higher education (i.e., appropriations) constant. In other words, the factors used in this model are the difference between the college and university multiplier and the household multiplier which were developed in the Texas and Houston-Galveston I-O Models. Since a change in sales tax was one of the legislature's options, taxable retail sales was chosen to illustrate the consequences of the proposed actions. Obviously, all sectors of the economy would be effected if funds were transferred from one sector to another, but retail sales was chosen as the most obvious and most immediate indicator of effect.

For the state as a whole, the output multiplier for colleges and universities is 3.1602; thus, for each dollar expended by colleges and universities, the total output and rates of sales by businesses and other establishments is increased by $3.16. The household output multiplier for households is 2.85477; thus, each dollar expended by a Texas household results in $2.85 to

businesses and other establishments. The difference between the two is .30543; therefore, a transfer of one dollar from colleges and universities to households (i.e., reduce the appropriations and do not increase taxes) would result in a decrease in the sales and output of business establishments of $0.30 for every dollar. Conversely, a transfer of one dollar from households to colleges and universities (i.e., increase the appropriations by increasing sales taxes) would result in an increase in the sales and output of businesses of $0.30 for every dollar transferred.

Similarly, the statewide effects on personal income of such a policy can be estimated using household income multipliers from the Texas Input-Output model. These multipliers describe the direct and indirect effects on the personal income of households in the state for an additional dollar of receipt by a given sector. The household income multiplier for colleges and universities is 1.76570 and the household income multiplier is 1.48908. The difference is .27662, which means that a transfer of one dollar from colleges and universities to households (i.e., reduce appropriations and do not increase taxes) would decrease the change in earned income of households by $0.28. In other words, that dollar "saved" actually would be only $0.72.

Furthermore, the $0.28 lost to net income would result in a decrease in projected state and local taxes collected. The average state and local tax rate in Texas has been calculated to be 4.6% (Texas Almanac, 1985). Taxes collected would be 3.3 cents per dollar of the reduction in state appropriations to higher education, not the 4.6 cents per dollar as would appear on the surface (a 28% reduction in "projected" state revenues).

Several assumptions must be made if the focus of the analysis is to be shifted from a state-wide projection to one which concentrates on counties which contain state universities and colleges. The analysis must differentiate between campuses located in large metropolitan areas (such as Dallas-Fort Worth, Houston-Galveston, Austin, and San Antonio) and campuses located in smaller cities (such as College Station-Bryan, San Marcos, Huntsville, Alpine, etc.). Multipliers from the Houston-Galveston Area Input-Output Model (1979) were used for campuses located in large metropolitan areas while the Texas I-O Model multipliers were used for the other counties. The four metropolitan areas do not have exactly the same economic structure, so using the Houston-Galveston Model multipliers introduces a slight error. Refinement of the model will include multipliers generated by the actual regional models. It was assumed that colleges and universities in small cities and predominantly rural areas would direct their non-payroll expenditures outside the local community. In other words, estimates of the effects of budget changes on small cities would be described best by the direct effects alone, with the exception of the universities' payrolls which were estimated to be one-third of the total budget. Thus the multiplier does not consider the effects local expenditures have on the local economy.

It was also assumed that a 1% change in university expenditures would result in a 0.5% change in the enrollment of students from outside the community which would induce further effects on the local economy. While this last assumption is arbitrary, the actual measurement of the effects of budgetary changes on students moving into the area for schooling is extremely difficult

to determine and would be a separate study of its own. It was assumed that 25% of the enrollment at urban universities came from outside of the area while 75% of the enrollment at rural universities was from outside of the county.

SCENARIOS

For purposes of demonstrating the model two fictitious universities have been created: Texas State University at Urban (to demonstrate the metropolitan multipliers) and Texas State University at Rural (to demonstrate the multipliers used for the smaller cities). It must be kept in mind that the original purpose of the higher education budgetary model was to illustrate the statewide effects of budgetary changes and that all Texas colleges and universities were included in the actual presentation. Furthermore, the I-O models were neither intended nor designed to describe an economic system as small as a community or single institution.

Table 2 shows the various equations derived for the budgetary input-output model. Row 1 lists the number of people employed in those counties in the previous year and row 2 lists the fall enrollment at each campus . The next three rows (3 through 5) list the budgeted appropriations for the previous fiscal year and the estimated effects of the budgets on the local economies. "Retail Sales" is derived by multiplying the budgeted amount by the higher education multiplier and adding the induced effects due to non-resident students attending that school. "Employment" is calculated by multiplying the budgeted amount by a factor derived from the employment multiplier and the ratio of employment to output and adding the induced effects of

non-resident students on employment.

Rows 6-8 show the estimated direct effects of the proposed changes over the previous fiscal year appropriations for each campus. "Amount" is the resulting change in budgeted appropriations. The other two rows use the same equations as the "Budgeted" rows, but apply them to the amount of the change in budget (row 6). Rows 9-11 repeat these equations for induced effects, which were assumed to be modeled best by a change in enrollment of out-of-county students. Rows 12-14 list the total effects of the change in appropriations on the community, which are the sums of the direct effects and the induced effects. Row 13 shows the percentage of the total employment in the community which is effected by the change.

The Texas State University at Urban

The Texas State University at Urban is a campus of approximately 34,000 students in a metropolitan area of Texas (Table 3). Its budget last fiscal year was $131.9 million. Approximately 684,000 people are employed in the area and retail sales last year were over $11 billion. It is estimated that the University's contribution to retail sales was about $324 million, or 2.76 percent. Approximately 7% of the workforce, or over 10,000 people are effected by the presence of the campus. Of these, over 9,700 are directly effected by the infusion of the University's appropriations into the city's economy, which is about $311 million of the annual retail sales. The remainder is due to the students from elsewhere in Texas and the country who are attracted to the campus.

If the annual budget of the University were to be reduced by 10% (Table 4), the city would lose over $32 million in retail sales and nearly 1000 jobs would be effected, with an added 70 lost because reduced University services and financial aid would make it difficult to attract students. The loss in jobs is less than two tenths of a percent and the loss in retail sales is about three tenths of a percent.

Since the budgetary model is linear, a decrease of 5% in the annual budget would be one half the 10% reduction. Similarly, a 5% increase in appropriations (Table 5) is estimated to add the same amount -- $15.5 million in retail sales and 488 jobs, with another $700 thousand and 35 jobs due to increased student services.

The Texas State University at Rural

The Texas State University at Rural is a campus of 14,000 students in a small city in "rural" Texas. The city's major industry is supplying the area's ranchers and farmers, and the University. There are approximately 15,000 employed in the county and annual retail sales is $276 million. It is estimated that the University's $40 million budget accounts for approximately $34.4 million of last year's retail sales, which effected nearly 3,500 jobs. As the University directs most of its purchases outside of the county, $18 million was due to local purchases while the remining $16 million was due to the students who came to the University's rural setting instead of a "large, impersonal" campus. Over 860 people are employed because of the influx of these non-resident students. The University is a major economic factor in the county as over 20% of the workforce is effected by its presence.

Were the University's budget to be reduced by 10%, or $4 million (Table 4), the county would lose and estimated $3.4 million in retail sales, nearly half of it due to fewer non-resident students attending the University. A total of 350 jobs would be effected, or 2.3% of the county's workforce.

As the model is linear, a 5% reduction in appropriations would have half of the 10% reduction effect on the county, still 1.2% of the workforce and $1.7 million in retail sales. A 5% increase in appropriations would infuse the same amount into the local economy -- 175 jobs, or 1.2% of the number employed and $1.7 million in retail sales.

SUMMARY

The Texas I-O Model was modified into a higher education budgetary model. This new model included the positive benefits of tax savings and estimated the net effect on the various communities in which state-supported colleges and universities were located. The output measures were sales and employment. Using a budget reduction of 26%, as was proposed , the model indicated that 12 communities, including the state capital, would suffer a drop in employment of more than 2% and six communities would be hit by disasterous 5-20% fall in employment. Correspondingly, sales would decline by more than 10% in 12 communities.

As the Texas Legistature continued to meet, the proposed 26% reduction began to decline, eventually settling around a 5% reduction. Since the higher education model was designed with flexibility as a major consideration, it was easily adapted for the various appropriation estimates under discussion.

Based upon these estimates, numerous scenarios were developed and presented to the Council of Presidents.

TABLE 1
SAMPLE PORTION OF AN INPUT-OUTPUT MATRIX

	<---------- OUTPUT SECTOR ---------->						
	1	9	18	112	...	167 COLLEGES & UNIVERSITIES	176 HOUSEHOLDS
INPUT SECTOR							
1: Irrigated Cotton						.	.
9: Range Livestock Production						.	.
18: Crude Petroleum						.	.
112: Games and Toys						.	.
167: COLLEGES & UNIVERSITIES						1.06095	0.070973
175: Scrap						.	.
176: HOUSEHOLDS						1.76570	1.48973
TOTAL INPUTS:						3.1602	2.85477

Source: Texas Input-Output Model, 1979.

TABLE 2
ECONOMIC EFFECTS OF FUNDING CHANGES
ON UNIVERSITY-BASED COMMUNITIES

Formulae and Sources

I. Demographics

Formula 1: Number of Employees in County or Area
Source #1

Formula 2: Preliminary Fall Headcount Enrollment by University
Source #2

II. Estimated Present Effects

Formula 3: Previous Fiscal Year Budgeted funds, by University
Source #3 (in millions of dollars)

Formula 4: Estimated Effects of Previous FY Expenditures on Local Economy (Retail Sales in millions of dollars), Source #4

Texas State University at Urban:

= Formula (3) * Higher Education Multiplier + Induced Effects
= Formula (3) * 2.3558 + Induced Effects

Texas State University at Rural:

$$= \text{Formula (3)} * \left[\frac{\text{Local Expenditures}}{\text{Total Expenditures}} + \left(\frac{\text{Wage Payments}}{\text{Total Expenditures}} * \frac{\text{Higher Education Multiplier}}{3} \right) \right] + \text{Induced Effects}$$

= Formula (3) * [.18015 + (.40557 * .67141)] + Induced Effects
= Formula (3) * .45245 + Induced Effects

Induced Effects on Local Economy Due to Non-Resident Students

= (Formula (2) * .5 * Percent Non-Local) * 3.101

Formula 5: Estimated Effects of Previous FY University Expenditures On Local Employment (number of jobs), Sources #4 & #5

Texas State University at Urban:

$$= \text{Formula (3)} * \left[\frac{\text{Employment}}{\text{Output}} \right] * \text{Employment Multiplier} + \text{Induced Effects}$$

= Formula (3) * .04821 * 1.5349 + Induced Effects
= Formula (3) * .073998 + Induced Effects

Formula 5 continued:

Texas State University at Rural:

$$= \text{Formula (3)} * \left[\text{AVG} \left(\frac{\text{Employment}}{\text{Output}} \right) \right.$$

$$* \left[\frac{\text{Local Employmt}}{\text{Total Expend}} + \left(\frac{\text{Wage Payments}}{\text{Total Expend}} \right. \right.$$

$$\left. \left. * \frac{\text{Higher Ed Mult}}{3} \right) \right] \left. \right] + \frac{\text{Employment}}{\text{Output}}$$

$$+ \text{Induced Effects}$$

$$= \text{Formula (3)} * [.03856 * [.18015 + (.40557 * .67141)]] + .04821 + \text{Induced Effects}$$

$$= \text{Formula (3)} * [.01745 + .04821] + \text{Induced Effects}$$

$$= \text{Formula (3)} * .06566 + \text{Induced Effects}$$

Induced Effects on Local Employment Due to Non-Resident Students

$$= (\text{Formula (2)} * .5 * \text{Percent Non-Local}) * 0.1654$$

III. Predicted Direct and Indirect Effects For Next Fiscal Year:

Formula 6: Budget Change in Next FY over Previous FY
Source #3 (in millions of dollars)
Recommended Next FY - Budgeted Previous FY

Formula 7: Predicted Effects of Budget Change on Local Economy
(Sales in millions of dollars)
See Formula #4, use Formula (6)

Formula 8: Predicted Effects of Budget Change on Local Employment
See Formula #5, use Formula (6)

IV. Predicted Induced Effects Due to Enrollment:

Formula 9: Predicted Change in Enrollment of Non-Local Students
Due to Budget Change:

$$\text{Formula (2)} * \left(\frac{\text{Decrease}}{\text{Formula (3)}} \right) * .5 * (\text{percent non-local})$$

Formula 10: Predicted Change in Local Economy Due to Change in Enrollment, Source #4
Formula (9) * 3.101

Formula 11: Predicted Change in Employment Due to Change in Enrollment
Source #4
Formula (9) * .1654

Sources:

(1) Texas Almanac, 1984-85
(2) Comparison of Fall Semester Headcount Enrollments
(3) Agencies of Public Education, General Revenue
(4) Houston-Galveston Input-Output Model, 1979
(5) Texas Input-Output Model, 1979

TABLE 3
ECONOMIC EFFECTS OF FUNDING CHANGES
ON UNIVERSITY-BASED COMMUNITIES

No Change in Previous Budget

	TEXAS STATE UNIVERSITY AT URBAN	AT RURAL
NUMBER EMPLOYED IN COUNTY	684,000	15,000
ANNUAL RETAIL SALES ($million)	$11,753	$276
FALL ENROLLMENT (headcount)	34,000	14,000
PREVIOUS FISCAL YEAR		
UNIVERSITY BUDGET ($million)	$131.9	$40.0
CONTRIBUTION TO RETAIL SALES ($million)	$324.0	$34.4
CONTRIBUTION TO EMPLOYMENT (number)	10,500	3,500
DIRECT EFFECTS OF CHANGE IN BUDGET		
RECOMMENDED BUDGET ($million)	$131.9	$40.0
BUDGET CHANGE ($million)	$131.9	$40.0
CHANGE IN RETAIL SALES ($million)	$310.8	$18.1
CHANGE IN EMPLOYMENT (number)	9,764	2,629
EFFECTS ON ENROLLMENT (NON-LOCAL STUDENTS)		
CHANGE IN ENROLLMENT (number)	4,250	5,250
CHANGE IN RETAIL SALES ($million)	$13.2	$16.3
CHANGE IN EMPLOYMENT (number)	703	868
TOTAL EFFECT OF CHANGE IN BUDGET		
CHANGE IN EMPLOYMENT (number)	10,467	3,497
PERCENT OF TOTAL EMPLOYED	1.5%	23.3%
CHANGE IN RETAIL SALES ($million)	$324.0	$34.4
PERCENT OF TOTAL RETAIL SALES	2.8%	12.5%

TABLE 4
ECONOMIC EFFECTS OF FUNDING CHANGES
ON UNIVERSITY-BASED COMMUNITIES

10% Reduction in Budget

	TEXAS STATE UNIVERSITY AT URBAN	AT RURAL
NUMBER EMPLOYED IN COUNTY	684,000	15,000
ANNUAL RETAIL SALES ($million)	$11,753	$276
FALL ENROLLMENT (headcount)	34,000	14,000
PREVIOUS FISCAL YEAR		
UNIVERSITY BUDGET ($million)	$131.9	$40.0
CONTRIBUTION TO RETAIL SALES ($million)	$324.0	$34.4
CONTRIBUTION TO EMPLOYMENT (number)	10,500	3,500
DIRECT EFFECTS OF CHANGE IN BUDGET		
RECOMMENDED BUDGET ($million)	$118.8	$36.0
BUDGET CHANGE ($million)	($13.2)	($4.0)
CHANGE IN RETAIL SALES ($million)	($31.1)	($1.8)
CHANGE IN EMPLOYMENT (number)	-976	-263
EFFECTS ON ENROLLMENT (NON-LOCAL STUDENTS)		
CHANGE IN ENROLLMENT (number)	-425	-525
CHANGE IN RETAIL SALES ($million)	($1.3)	($1.6)
CHANGE IN EMPLOYMENT (number)	-70	-87
TOTAL EFFECT OF CHANGE IN BUDGET		
CHANGE IN EMPLOYMENT (number)	-1047	-350
PERCENT OF TOTAL EMPLOYED	-0.2%	-2.3%
CHANGE IN RETAIL SALES ($million)	($32.4)	($3.4)
PERCENT OF TOTAL RETAIL SALES	-0.3%	-1.2%

TABLE 5
ECONOMIC EFFECTS OF FUNDING CHANGES
ON UNIVERSITY-BASED COMMUNITIES

5% Increase in Budget

	TEXAS STATE UNIVERSITY AT URBAN	AT RURAL
NUMBER EMPLOYED IN COUNTY	684,000	15,000
ANNUAL RETAIL SALES ($million)	$11,753	$276
FALL ENROLLMENT (headcount)	34,000	14,000
PREVIOUS FISCAL YEAR		
UNIVERSITY BUDGET ($million)	$131.9	$40.0
CONTRIBUTION TO RETAIL SALES ($million)	$324.0	$34.4
CONTRIBUTION TO EMPLOYMENT (number)	10,500	3,500
DIRECT EFFECTS OF CHANGE IN BUDGET		
RECOMMENDED BUDGET ($million)	$138.5	$42.0
BUDGET CHANGE ($million)	$6.6	$2.0
CHANGE IN RETAIL SALES ($million)	$15.5	$0.9
CHANGE IN EMPLOYMENT (number)	488	131
EFFECTS ON ENROLLMENT (NON-LOCAL STUDENTS)		
CHANGE IN ENROLLMENT (number)	213	263
CHANGE IN RETAIL SALES ($million)	$0.7	$0.8
CHANGE IN EMPLOYMENT (number)	35	43
TOTAL EFFECT OF CHANGE IN BUDGET		
CHANGE IN EMPLOYMENT (number)	523	175
PERCENT OF TOTAL EMPLOYED	0.1%	1.2%
CHANGE IN RETAIL SALES ($million)	$16.2	$1.7
PERCENT OF TOTAL RETAIL SALES	0.1%	0.6%

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